

REMARKS

Applicants traverse the outstanding rejections without amendment.

Applicants first address the rejection of claims 1, 9, and 14 under 35 USC §112, first paragraph. The amendments to those claims introduced in the preceding response track the language of the specification. Specifically, at page 5, lines 25 through 29, applicants state:

The interjacent layer 11 consists of a plastic compound 11a and, substantially uniformly distributed in the compound, mineral filler particles 11b (unfilled squares in the Figure) and particles 11c of carbon black (black points in the Figure) which are preferably randomly distributed in the compound 11a between the mineral particles 11b. Neither the claims nor applicants remarks state or suggest that the use of the terms uniformly or randomly is intended to convey anything other than the ordinary meaning of those terms.

The dictionary definition of "uniform" includes the following "consistent in appearance; having an unvaried texture, color or design." *The American Heritage Dictionary*, Second College Edition, Houghton-Mifflin Company (1991). The definition for the term "random" includes the following "having no specific pattern or objective; haphazard." *The American Heritage Dictionary*, Second College Edition, Houghton-Mifflin Company (1991).

Thus, and as is consistent with the quoted passage from the specification, the mineral filler particles are substantially uniformly distributed such that they present an unvaried color texture or design; whereas the carbon black particles are distributed throughout the same layer in a random fashion relative to the mineral particles. In other words, the carbon black particles do not share the specific pattern of distribution of the mineral particles. One of ordinary skill in the art would thus understand from the quoted passage of the specification, as well as from Figure 1, that the carbon black particles are not distributed within the interjacent layer in the same pattern or ratio as the mineral particles.

Applicants do not employ the terms uniformly or randomly in a manner other than that associated with its common usage, or other than that which would be clearly understood

by one of ordinary skill in the art. Nor do applicants intend any other meaning. In short, applicants use of the two different terms is intended primarily to reflect that the two different types of particles are distributed throughout the interjacent layer but not in an identical pattern or in a manner having one to one correspondence of the particles.

In view of the fact that the terms as used in the claims are found within the specification and are used in a manner consistent with their common usage and accepted definitions, applicants respectfully submit that the §112, first paragraph, rejection is improper. Applicants request reconsideration and withdrawal of the rejection.

The foregoing reasoning applies equally to the rejection under §112, second paragraph. There, the Examiner states that the omitted structural cooperative relationships render the rejected claims indefinite. Applicants respectfully traverse the rejection. Specifically, and as stated above, applicants use of the different terms tracks the literal language of the specification. Furthermore, the adverbial phrases are consistent with dictionary definitions and common usage of the terms. Applicants have intended no alternative usage or definitions, and applicant's amendments and remarks do not suggest or rely upon any alternative definitions or usages. Accordingly, applicants respectfully submit that the rejection under §112, second paragraph, is misplaced, and respectfully request reconsideration and withdrawal of the rejection.

Applicants now turn to the rejection of claims 1, 2, 5-10 and 12-16 under §102(b) as allegedly anticipated by Akao et al. The anticipation rejection is improper because there is no teaching within Akao of a packaging material satisfying all the limitations of the instant claims.

Specifically, claim 1 requires a packaging material comprising a layer of plastic that prevents the transmission of ultraviolet light, which layer comprises particles of carbon black in an amount ranging from about 0.04 to about 1% of the total weight of the plastic layer wherein said carbon black particles are randomly distributed throughout the plastic layer; and light reflecting mineral particles in an amount ranging from about 3 to about 80% of the

total weight of the plastic layer, and wherein the light reflecting mineral particles are uniformly distributed throughout the plastic layer. The claim thus requires a unique relationship between carbon black and light reflecting mineral particles, and wherein the combination of those particles are in the relationship such that the carbon black is present in a unusually small amount relative to the light reflecting mineral particles (i.e. about 0.04 to about 1 % carbon black to about 3 to about 80% light reflecting mineral particles). This unique relationship of materials, and the quantity of those materials, is borne of applicants discovery of the synergistic effect between the use of the carbon black material in combination with the light reflecting materials such that the two in combination prevent the transmission of ultraviolet light and afford other advantages such as the maintenance of an overall white appearance despite the presence of carbon black in sufficient quantity to achieve the desired light absorbing/blocking properties. Nowhere does the Akao reference recite the specific combination in a single layer of carbon black and light reflecting mineral particles in the respective concentrations.

Similarly, claim 9 requires a package comprising an intermediate plastic layer and two outer layers on either side of the intermediate layer, the intermediate layer comprising about 0.04% to about 1.0% by weight of a light absorbing material randomly distributed throughout the layer, and about 3 to about 80% of a light reflecting material uniformly distributed throughout the layer such that the intermediate layer prevents the transmission of ultraviolet light, and wherein the two outer layers are fabricated from the same plastic as the intermediate layer and at least one of said outer layers comprises less than about 5% by weight of a white pigment such that the package has a white appearance.

Nowhere does the rejection point to a teaching within the Akao reference of a package meeting each and every one of the recited limitations. In particular, the rejection fails to identify any teaching of a package having the specified three layers wherein the intermediate layer comprises the specified quantities of a light absorbing material and light reflecting material, and wherein the specified layers prevent the transmission of light while

maintaining an overall white appearance. Furthermore, the reference fails to teach such packages wherein the materials of the various layers share the compositional requirements specified in the claim. Rather the rejection culls the various limitations and characteristics from a general teaching that provides no disclosure or recognition of the synergistic effect achieved here. As such, the rejection fails to identify any one embodiment or specific teaching within the cited reference of a package containing each and every one of the recited limitations.

It has been argued with regard to claim 9, that

Akao et al. teach the inclusion of titanium dioxide (a white pigment) in the layers of the invention in an amount of 0.1 to 60 wt.% (col. 33, line 61- col. 34, line 3) that would conceal the intermediate layer (item 7a) containing carbon black, at least from one direction. Akao et al. therefore teach that at least one of the outer layers comprises less than about 5% by weight of a white pigment. Akao et al. teach that one layer of the multilayer bag is colored white (col. 43, line 65- co. 44, line 5), and therefore, the bag has a white appearance.

The argument takes the liberty of collecting disjointed statements within the reference and combining them in such a way as to allegedly arrive at the present invention with the benefit of hindsight. The argument makes assumptions and conclusions that do not appear in the cited portions of the text. Specifically, nothing within the cited portion of the text states that the resulting bag has a white appearance. The cited text likewise fails to teach that the instantly claimed quantity of light reflecting material can be combined with layers containing the specified quantity of light absorbing material to create a bag having a white appearance, as opposed to merely one layer as alleged. Nothing within the cited text states that the combination of the instantly claimed quantities of light absorbing material in combination with the instantly claimed quantities of light reflecting material can be combined together in such a way as to both prevent the transmission of ultraviolet light and impart a white appearance to the bag. As such, the novelty rejection is inadequate and thus improper. As there is no embodiment or teaching incorporating all of the recited features so as to arrive at the

claimed product, the rejection under §102 is improper. Accordingly, the rejection under 102(b) of claim 9 is improper. Reconsideration and withdrawal of the rejection is respectfully requested.

Claim 14 generally requires a packaging material comprising at least two layers of plastic wherein a first layer comprises about 0.04% to about 1.0% by weight of light absorbing material randomly distributed throughout the layer and about 3% to about 80% by weight light reflecting material uniformly distributed throughout the layer, a second layer comprising less than about 5% of a white pigment uniformly distributed throughout the second layer, and wherein the first and second layers are combined such that the layers prevent the transmission of ultraviolet light while presenting a white appearance when viewed from the second layer side of the material.

As discussed above with respect to claim 9, applicants submit that the rejection of claim 14 fails to identify any teaching within the Akao reference of a packaging material meeting all the specified limitations. That is, the rejection fails to identify any teaching within the Akao reference of a two layered packaging material having the specified quantities of light absorbing material, the specified quantities of light reflecting material, the specified distribution of those materials relative to each other, and a second layer having the specified quantity of white pigment, and wherein the two layers are combined to prevent the transmission of UV light while presenting a white appearance. In the absence of such a showing, the §102(b) rejection is improper, and applicants respectfully request reconsideration and withdrawal of the rejection of this claim and any of its dependent claims.

In view of the foregoing, the rejections of claims 1, 9 and 14, and any and all claims dependent thereon are improper. Reconsideration and withdrawal of those rejections is respectfully requested.

Likewise, the §103 rejections are misplaced. Claim 3 is rejected over Akao in view of Rosen. Claim 3 is dependent on claim 1. As discussed above, the various elements of claim 1 have not been identified in any specific teaching or embodiment of the Akao

reference. Thus, applicants contend that the Akao reference does not teach all the elements of claim 3 but for the ethylene-propylene copolymer of the specified melt index.

Further, Rosen does not make up for the deficiencies of Akao. Rosen does not teach the combination of carbon black in the specified quantities with light reflecting mineral particles in the specified quantities; nor does Rosen teach or suggest that the components can be combined within a high density polyethylene or copolymer of ethylene and propylene of the specified melt index properties to arrive at the instant claimed invention. Accordingly, Rosen does not address the deficiencies of the §102 or §103 rejections in view of Akao, and the rejection is misplaced. Applicants request reconsideration and withdrawal of the rejection.

Applicants traverse the rejection of claim 11 under §103 in view of Akao. The rejection asserts only that it would have been obvious to optimize a result-effective variable in the absence of unexpected results. The ability to so optimize that variable in combination with the specified quantities of carbon black would not have been obvious in the absence of applicants' disclosure. The rejection relies on hindsight and the rhetorical expedient of "optimization" to argue obviousness. If the rejection is relying upon well known prior art rather than applicants' own disclosure, applicants ask that the Office cite that well known art so that applicants can formulate an informed response. MPEP 2144.03.

Moreover, Applicants have urged repeatedly that the high degree of light shielding achieved with such low levels of light absorbing material is unexpected. Thus, by the very reasoning of the rejection, it is improper. Applicants request reconsideration and withdrawal of the rejection.



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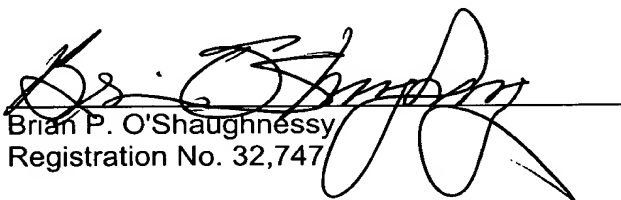
In view of the foregoing remarks, Applicants submit that the claims are in condition for allowance. Applicants request formal notification to that effect. If, however, the Office perceives any impediments to such formal notification, whether formal or substantive, the Examiner is encouraged to call Applicants' representative at the number provided below. Such informal communication will expedite examination and disposition of the case.

Respectfully submitted,

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